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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,114	12/16/2003	Mark F. DeHerrera	1280-SC126912C	5497
34814	7590	05/03/2005	EXAMINER	
TOLER & LARSON & ABEL, L.L.P. 5000 PLAZA ON THE LAKE SUITE 265 AUSTIN, TX 78746			LE, THONG QUOC	
			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/737,114

Applicant(s)

DEHERRERA ET AL.

Examiner

Thong Q. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 17, 22-24 and 32-36 is/are rejected.
- 7) ☒ Claim(s) 9-16, 18-21 and 25-31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-36 are presented for examination.

Information Disclosure Statement

2. This office acknowledges receipt of the following items from the Applicant:
Information Disclosure Statement (IDS) filed on 12/16/2003.
3. Information disclosed and list on PTO 1449 was considered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: "means for applying a second magnetic field".

With understanding of examiner, claim is incomplete and claim 35 overcomes claim 36.

Claim 36 should be amended for more clearly.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Nakazawa (U.S. Patent No. 6,074,707).

Regarding claim 1, Nakazawa et al. disclose a method (ABSTRACT) comprising:
applying a first magnetic field to a magneto resistive memory cell (Column 1, lines 15-59); and

applying a second magnetic field to the magneto resistive memory cell (Column 1, lines 15-59);

wherein the first magnetic field failed to write a desired value to the magneto resistive memory cell and wherein the second magnetic field is stronger than the first magnetic field (Column 2, lines 31-40).

8. Claims 1-8,17, 22-24, 32-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimura (U.S. Patent No. 6,028,786).

Regarding claim 32, Nishimura discloses a magneto resistive memory unit (Figure 19) comprising:

a plurality of digit strip lines (7);
a plurality of word strip lines (5);
a plurality of magneto resistive memory cells (17, Figure 1) arranged in an array;
and

a plurality of storage units (Figure 4, 4) configured to store information regarding a force level of a plurality of magnetic fields (Column 2, lines 35-39) to be applied to the plurality of magneto resistive memory cells (ABSTRACT, Column 2, lines 6-17).

Regarding claim 33, Nishimura discloses wherein the plurality of storage units identify a first magnetic field having a first force to be applied to select ones of the plurality of magneto resistive memory cells or a second magnetic field having a second force to be applied to other select ones of the plurality of magneto resistive memory cells; wherein the first force is less than the second force (Column 1, lines 50-60, Figure 3A, Column 2, lines 35-40).

Regarding claims 1-8,17, 22-24, 34-36, Nishimura discloses an apparatus comprising: means for applying a first magnetic field to a magneto resistive memory cell; and means for applying a second magnetic field to the magneto resistive memory cell; wherein the means for applying the first magnetic field failed to write a desired value to the magneto resistive memory cell and wherein the second magnetic field is stronger than the first magnetic field (Column 26, lines 5-55), and wherein the means for applying the first magnetic field comprises means for applying a first current pulse having a first current level to a strip line of the magneto resistive memory cell; wherein the means for applying the second magnetic field comprises means for applying a second current pulse having a second current level to the strip line of the magneto resistive memory cell; and wherein the second current level is higher than the first current level (Figures 2A-2D, Column 1, lines 30-67), and wherein the means for applying the first magnetic field comprises means for applying a first current pulse

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having a first current level to a strip line of the magneto resistive memory cell (Column 1, lines 35-67).

Allowable Subject Matter

9. Claims 9-16,18-21,25-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 9-16,18-21,25-31 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Nakazawa (U.S. Patent No. 6,074,707), and Nishimura (U.S. Patent No. 6,028,786), and others, does not teach the claimed invention having a performing a read of the magneto resistive memory cell to determine the stored value prior to applying the first magnetic field; and performing another read of the magneto resistive memory cell after applying the first magnetic field.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 571-272-1783. The examiner can normally be reached on 8:00am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai V. Ho can be reached on 571-272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Le
Primary Examiner
Art Unit 2827

THONG LE
PRIMARY EXAMINER